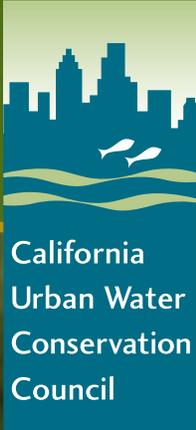


MUNI/WESTERN EXHIBIT 10-21

**WATER SMART LANDSCAPES FOR CALIFORNIA,
AB 2717 LANDSCAPE TASK FORCE FINDINGS,
RECOMMENDATIONS, & ACTION, REPORT TO
THE GOVERNOR & LEGISLATURE, DECEMBER
2005, EXECUTIVE SUMMARY**



Water Smart Landscapes for California

AB 2717 Landscape Task Force
Findings, Recommendations, & Actions

Mission Statement

The Mission of the Task Force was to make recommendations leading to comprehensive actions that will improve landscape water use efficiency. These improvements will help ensure a reliable water supply for the State; increase the sustainability of urban landscapes; and reduce environmental costs and damage.

The Task Force addressed the challenge of creating attractive water efficient California landscapes that are harmonious with the diverse and unique environments that are California and that complement economic development within the State.

Acknowledgements

This effort was financed solely through contributions from the following stakeholders:

American Canyon, City of
AquaMetrics
California Landscape Contractors Association
Castaic Lake Water Agency
Chino Basin Water Conservation District
Coachella Valley Water District
Cotati, City of
Cucamonga Valley Water District
Dendron Landscaping
East Bay Municipal Utility District
Eastern Municipal Water District
HydroPoint
Irvine Ranch Water District
Jurupa Community Services District
Lake Arrowhead Community Services District
Los Angeles Department of Water and Power
Metropolitan Water District of Southern California
Monrovia Nursery
Municipal Water District of Orange County
Newhall County Water District
Nursery Growers Association
Oceanside, City of
San Diego, City of
San Diego County Water Authority
San Francisco Public Utilities Commission
San Luis Obispo, City of
Santa Clara Valley Water District
Santa Cruz, City of
Santa Monica, City of
Santa Rosa, City of
Sonoma County Water Agency
US Bureau of Reclamation
(Mid Pacific & Lower Colorado Regions)
Valley Center Municipal Water District
Village Nurseries
Western Municipal Water District



Executive Summary

Urban landscapes are vital to the quality of life in California communities. Landscapes beautify and soften urban environments; screen noise and unpleasant sights; serve as a refuge for people, birds and other wildlife; and contribute toward cleaner air and temperature moderation. The landscape industry provides jobs for Californians and contributes toward the economic welfare of the state.

These beautiful landscapes do not come without cost. Landscape irrigation is the single largest use of water in urban areas, comprising approximately a third of urban water use. California's water supply is limited and under increasing pressure from a growing population. Yet Californians use almost 3 million acre-feet of water to irrigate our landscapes.

Water Conservation is Essential to a Reliable Water Supply for California's Future.

Water efficient landscapes can benefit water suppliers, water users, and the environment through:

- Reduced average daily water demand
- Reduced seasonal peak water demand
- Reduced water extractions
- Reduced run-off, overspray and soil erosion, resulting in improved water quality and less degradation of roads and other structures
- Reduced green waste production
- Avoided cost of energy
- Avoided cost of water treatment
- Avoided cost of wastewater treatment

The legislative charge of Assembly Bill 2717, authored by Assemblyman John Laird and signed by Governor Arnold Schwarzenegger in 2004, requested the California Urban Water Conservation Council to convene a stakeholder task force to evaluate and recommend proposals by December 31, 2005, for improving the efficiency of water use in new and existing urban irrigated landscapes in California. Based on this charge, the Task Force adopted a comprehensive set of 43 recommendations.

The Landscape Task Force estimates that by implementing these recommendations California can achieve annual water savings of 600,000 to 1,000,000 acre-feet, enough water to meet the needs of up to two million households. Costs will vary depending upon the measures implemented, with an estimated average cost of \$250 to \$500 per acre-foot.

The complete list of recommendations and actions adopted by the Landscape Task Force follows (pages 4–11).

Top Twelve Recommendations

Task Force members believe the following twelve recommendations are most important in achieving the goal of greater landscape water use efficiency.

1. **Adopt water conserving rate structures as defined by the Task Force.**
2. **Reduce the ET Adjustment Factor (the landscape water budget) in the Model Ordinance and review the ET Adjustment Factor every ten years for possible further reduction.**
3. **Enforce and monitor compliance with local ordinances and the Model Ordinance.**
4. **Require dedicated landscape meters.**
5. **Promote the use of recycled water in urban landscapes.**
6. **Require that local ordinances be at least as effective as the Model Ordinance.**
7. **Increase the public's awareness of the importance of landscape water use efficiency and inspire them to action.**
8. **Require Smart Controllers.**
9. **Adopt and enforce statewide prohibitions on overspray and runoff.**
10. **Provide training and certification opportunities to landscape and irrigation professionals.**
11. **Support upgrading the CIMIS (California Irrigation Management Information System) Program.**
12. **Adopt performance standards for irrigation equipment.**

Landscape Task Force Recommendations & Actions



The Top 12 Recommendations Are Shaded



Coordination, Processes, & Institutions

RECOMMENDATION 1

Increase the public's awareness of the importance of landscape water use efficiency and inspire them to action.

- Action 1.1** DWR, in concert with CUWCC, SWRCB, local water agencies and other stakeholders, should establish a statewide public outreach, education, and marketing program promoting water efficient landscapes based on a marketing survey to determine what motivates Californians in terms of the relationship between landscape choices and water use efficiency.

RECOMMENDATION 2

Require that local ordinances be at least as effective as the Model Ordinance.

- Action 2.1** The Legislature should require that the Model Ordinance be adopted by all local agencies unless the local agency adopts (or has adopted) an alternative ordinance that is demonstrated to be at least as effective at landscape water conservation as the Model Ordinance by 2010.
The local agency must document that landscapes subject to the local ordinance will use no more water than if they were subject to the Model Ordinance; issue findings as such through the local public hearing process; and file the findings with DWR.

RECOMMENDATION 3

Enforce and monitor compliance with local ordinances and the Model Ordinance including an enforcement mechanism to insure effective irrigation system installation and efficiency.

- Action 3.1** DWR should make the Certification of Compliance requirement in the Model Ordinance more rigorous. All Certifications of Compliance shall include an in-person inspection by qualified, independent personnel.
- Action 3.2** Local land use agencies should employ an enforcement mechanism to ensure the effective installation and efficiency of the irrigation system.

RECOMMENDATION 4

Establish ongoing cooperative efforts between local land use agencies and water suppliers.

- Action 4.1** Local land use agencies and water suppliers should establish cooperative agreements that will define the roles and responsibilities of both entities from project inception through installation, certification, operation and maintenance and facilitate the sharing of information and resources, recognizing local land use agencies' jurisdiction for planning, permitting, monitoring and enforcing implementation.

RECOMMENDATION 5

Promote a regional approach to landscape water use efficiency standards.

- Action 5.1** DWR should promote new and existing regional alliances to coordinate the updating of local landscape ordinances based on regional conditions and needs in the process of updating the Model Ordinance and notifying local agencies of changes .

RECOMMENDATION 6

Involve Property Owners Associations in active landscape water conservation efforts.

- Action 6.1** The Legislature should require that within a reasonable time frame, Property Owners Associations with 25 units or more, in consultation with their water supplier, establish water budgets based on acreage, install dedicated meters and/or Smart Controllers.

RECOMMENDATION 7

Support and encourage the use of California native plants and other low water using plants in well-maintained landscapes, and restrict Property Owners Associations from forbidding them.

Action 7.1	The Legislature should restrict Property Owners Associations from forbidding the use of California native plants or other low water using plants in well-maintained landscapes.
Action 7.2	Local land use agencies should check their codes, design criteria, and other operational guidelines to ensure that California native and low water using plants are not prohibited.

RECOMMENDATION 8

Include charter cities and counties in Model Ordinance requirements.

Action 8.1	The Legislature should move the Model Ordinance from the Government Code to the Water Code to include charter cities and counties.
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RECOMMENDATION 9

Subject publicly controlled projects to the Model Water Efficient Landscape Ordinance or the local ordinance in their jurisdiction.

Action 9.1	State, federal and local agencies not subject to the Model Water Efficient Landscape Ordinance or the local landscape ordinance should conform with those ordinances whenever feasible. Public agencies should demonstrate the elements of water efficient landscapes in public venues to provide good examples for Californians.
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RECOMMENDATION 10

Maintain the Model Ordinance water budget approach and provide user guides and simplified materials for various user groups.

Action 10.1	DWR should maintain the existing Model Ordinance Water Budget approach; make it more user friendly; provide a variety of training opportunities and resources on a regional basis; and produce simple and attractive educational materials including a Model Ordinance Technical Manual and “companion brochures” for various audiences.
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RECOMMENDATION 11

Provide for a successor effort where an entity will follow through with recommendations and document progress.

Action 11.1	The State should provide funding for an appropriate statewide entity to act as the designated entity that will follow-through with recommendations and document progress.
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Irrigation



RECOMMENDATION 12

Reduce the ET Adjustment Factor in the Model Ordinance and review the ET Adjustment Factor every 10 years for possible further reduction.

Action 12.1	DWR should reduce the ET Adjustment Factor in the Model Ordinance by 2010 for new non single-family development, based on the results of a three year study of new and established landscapes designed to meet a variety of ET Adjustment Factors and a mix of plant factors (including the 0.5 plant factor) and other data as available. If state funds are not available, DWR should seek funding from other sources to support the study. If the study is not funded, DWR should proceed based on best available data. To guide the study, DWR should convene a stakeholder advisory group with broad representation that includes the landscape industry, environmental groups, water suppliers, the building industry, universities, and other parties as appropriate.
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RECOMMENDATION 13

Reduce the Water Budget in the California Urban Water Conservation Council’s Best Management Practice 5 (BMP 5) from 100 percent to 80 percent of ETo.

Action 13.1	CUWCC should revise BMP 5 to reduce the Water Budget from “not to exceed 100 percent” to “not to exceed 80 percent” of ETo. CUWCC should review this percentage every 10 years for further reduction.
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RECOMMENDATION 14	
Require irrigation audits for landscapes 20 percent over Water Budget.	
Action 14.1	CUWCC should revise Best Management Practice 5 (BMP 5) to phase in more rigorous water budgets for both dedicated and mixed use meters and to require an irrigation survey and/or an irrigation audit for landscapes 20 percent over budget.
RECOMMENDATION 15	
Support upgrading the CIMIS Program.	
Action 15.1	DWR should fully fund and staff the California Irrigation Management Information System (CIMIS) Program to improve the quality, reliability, and stability of data and services; the frequency of updates; develop a standard data format; and increase the areas of coverage.
Action 15.2	DWR should make weather data easily available for public and private use via the Internet following a standard protocol; employ and support new technologies including remote sensing to allow users to easily obtain data; update the ETo tables in the Model Ordinance; complete work on non-ideal site ETo estimation and explore landscape coefficient refinements; and should reconvene a CIMIS users group. DWR should make weather data easily available for public and private use via the Internet following a standard protocol.
RECOMMENDATION 16	
Support the establishment of water budgets based on landscaped area via remote sensing.	
Action 16.1	DWR should work with an appropriate entity to provide land use data from the Department's GIS remote sensing database to water suppliers in support of their efforts to establish water budgets based on landscaped area.
RECOMMENDATION 17	
Adopt and enforce statewide prohibitions on overspray and runoff.	
Action 17.1	The Legislature should adopt a statewide restriction of irrigation overspray and runoff to minimize water waste and non-point source pollution. The legislation should include a warning and fine structure to encourage compliance.
Action 17.2	CUWCC should require signatories to report on enforcement and programs to reduce runoff and overspray as a component of BMP 13.
RECOMMENDATION 18	
Encourage the capture and retention of storm water onsite to improve water use efficiency and reduce water quality problems.	
Action 18.1	DWR in consultation with SWRCB should revise the Model Ordinance to encourage the capture and retention of storm water on site to improve water use efficiency and to reduce water quality problems.
Action 18.2	State and local governments should effectively control pollutants in waste water, urban runoff, and non-point source pollution by the application of a combination of pollution prevention, source control and treatment processes. Where feasible, water suppliers and wastewater utilities should adopt policies and offer cost-effective incentives to help achieve these goals. The use of natural approaches should be utilized over technology-based approaches whenever possible.
RECOMMENDATION 19	
Adopt performance standards for irrigation equipment.	
Action 19.1	The Legislature should require the appropriate state agency to set performance standards by 2009 for irrigation equipment, including emission devices, controllers, valves, and sensors.
Action 19.2	The Legislature should require third party verification that products meet the standards by 2009.



RECOMMENDATION 20

Establish labeling requirements for irrigation equipment.

Action 20.1	The Legislature should require the appropriate state agency to develop labeling requirements by 2009 based on the performance standards for landscape irrigation equipment sold or installed in California until such time that the federal government establishes a national program. If state standards are more stringent than federal standards, the state standards should prevail.
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RECOMMENDATION 21

Require dedicated landscape meters.

Action 21.1	The Legislature should require that water agencies install dedicated meters for all new, non-single family properties with more than 5,000 square-feet of irrigated landscapes.
Action 21.2	The Legislature should require that water agencies install dedicated meters for all existing non-single family properties with more than one acre of irrigated landscapes where cost effective from the agency and the customer perspective. If the dedicated landscape meter is not cost effective, then the water supplier shall offer incentives for the installation of efficient irrigation equipment, or other water conservation measures where cost effective. Local agencies should adjust capacity charges to ensure that accounts with dedicated meters are not overcharged.

RECOMMENDATION 22

Require Smart Controllers.

Action 22.1	The Legislature should require that by 2010 all irrigation controllers sold or installed in California shall meet the Irrigation Association's protocol for Smart Controllers.
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RECOMMENDATION 23

Promote the effective design, installation and maintenance of drip irrigation systems and other high efficiency irrigation technologies.

Action 23.1	CUWCC should partner with agencies, manufacturers, distributors and industry associations such as, but not limited to, California Landscape Contractors Association, the Irrigation Association, the American Society of Landscape Architects, universities and the American Society of Irrigation Consultants to develop guidelines and promote the successful design, installation, and maintenance of drip irrigation systems and other high efficiency irrigation technologies through public information, demonstration projects, incentives, outreach, education and marketing.
Action 23.2	Water suppliers, universities and industry associations should provide standard training and industry associations should provide certification of professionals in strategies that promote successful design, installation, and maintenance of drip systems.

RECOMMENDATION 24

Require a pressure regulating device if the pressure at the sprinkler head exceeds the manufacturer's recommended optimal operating pressure.

Action 24.1	DWR should revise the Model Ordinance to require pressure regulating devices if the pressure at the sprinkler head exceeds the manufacturer's recommended optimal operating pressure.
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RECOMMENDATION 25

Provide training and certification opportunities for landscape and irrigation professionals.

Action 25.1	The IA should work with the CLCA and CUWCC to create a statewide certification program, including a continuing education component, for landscape irrigation managers to include landscape water management, water budgets and irrigation system maintenance by 2008.
Action 25.2	CUWCC should provide a link to the list of certified landscape and irrigation professionals on its website.
Action 25.3	CUWCC should work with the Irrigation Association and the CA Landscape Contractors Association to amend the testing criteria for C27 (Landscape Contractor's License) to increase the content of materials related to landscape water management, water budgets and irrigation system maintenance and establish a requirement for continuing education units for C27 license renewal.

Action 25.4	Landscape contractors should require that field employees be certified as CLCA Landscape Technicians, that irrigation technicians should be certified as CLCA Landscape Technicians/Irrigation, and that irrigation managers and specialists be certified as Irrigation Association Landscape Irrigation Auditors or Irrigation Managers.
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RECOMMENDATION 26

Include a reference to the Irrigation Association’s Best Management Practices in the Model Ordinance.

Action 26.1	DWR should add a reference to the Irrigation Association’s Best Management Practices in the Model Ordinance.
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RECOMMENDATION 27

Promote the use of recycled water in urban landscapes.

Action 27.1	Local agencies should enforce existing State requirements pertaining to the installation of plumbing systems that would allow the use of recycled water in accordance with local ordinances.
Action 27.2	Local agencies should adopt ordinances to reduce concentration of dissolved salts (sodium, chloride, boron, bicarbonates, etc.) in recycled water for sustainable landscape irrigation.
Action 27.3	State and local agencies should work with recycled water suppliers to increase funding beyond existing sources toward long term technical assistance and outreach, advanced research on recycled water and landscape issues, and adequate water reuse/recycling infrastructure and facilities.
Action 27.4	The Water ReUse Association along with State and local agencies should work with the public to make education and outreach to users an integral part of any recycled water irrigation effort and work to improve the public perception of recycled water use in the landscape. The Water ReUse Association should publicize its statewide network of knowledgeable people in recycled water to be available to work cooperatively with users to solve problems.
Action 27.5	The Water ReUse Association should explore the potential for a general permit to facilitate compliance with Clean Water Act requirements.
Action 27.6	CUWCC should collaborate with waste water agencies to develop a Recycled Water Best Management Practice.
Action 27.7	DWR should add a section under the Maximum Applied Water Allowance to allow the inclusion of an additional allocation for sites using recycled water that have documented the need for leaching, and a management plan for appropriate use of this additional water.

RECOMMENDATION 28

Facilitate the use of graywater in residential landscapes.

Action 28.1	DWR should review new studies being conducted concerning the use of graywater and consider reviewing and revising the Graywater Standards if appropriate.
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Landscape Design, Plants, Turf Grass, & Soils

RECOMMENDATION 29

Update the Model Ordinance to promote further improvements in landscape water use efficiency related to landscape design, plants, turf grass, and soils.

Action 29.1	DWR should revise the Model Ordinance to require that a clear vision and goal statement be included; hydrozones be irrigated with equipment that is appropriate to the plants selected; plant selection be based upon soil conditions at the site; the planting of water conserving plants be encouraged; the use of invasive plants be avoided; water harvesting and rain catchment areas be designated; an on-site soil assessment be conducted and soil management plan prepared; and a standard worksheet to ease the development and review of projects be included.
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RECOMMENDATION 30

Redefine “landscaped area” to exclude areas designated for non-development.

Action 30.1	DWR should re-define “landscaped area” in the Model Ordinance to exclude areas designated for non-development.
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RECOMMENDATION 31

Conduct research to determine the effectiveness of the Model Ordinance and local ordinances in terms of water use in different climatic regions of the state.

Action 31.1	An appropriate entity, in coordination with the landscape industry, planning departments, local water districts and universities, should conduct long-term landscape research sites in different climatic zones across California to obtain and evaluate landscape water use data related to implementation of the Model Ordinance as well as local ordinances. The entity should establish a common framework for this assessment and disseminate results.
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RECOMMENDATION 32

Conduct research on the water needs of a broad range of landscape plants including trees, shrubs, ground covers, vines and turf grasses in the different climatic zones across the state.

Action 32.1	The Landscape Industry, local water agencies, state and federal agencies should conduct research on the water needs of landscape plants including trees, shrubs, ground covers, vines and turf grass and disseminate the results.
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RECOMMENDATION 33

Evaluate artificial turf applications.

Action 33.1	The Landscape Industry, local water agencies, and research institutions should conduct collaborative research on artificial turf in order to assess its potential for conserving water in urban landscapes as well as its costs and disseminate the results.
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RECOMMENDATION 34

Conduct a study to identify irrigation efficiency measurement methods and appropriate values for turf and non-turf areas.

Action 34.1	The Irrigation Association, Center for Irrigation Technology, University of California or other appropriate entity should conduct a literature search and, if need is indicated, collaboratively conduct field research to determine typical irrigation efficiency levels found in turf and non-turf areas and identify the key factors that contribute to efficiency losses.
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RECOMMENDATION 35

Provide a common foundation for the education, training, and certification of landscape professionals across the disciplines involved in designing, installing, maintaining and managing water efficient landscapes.

Action 35.1	The California Green Industry Council should convene a group of landscape professionals from the Irrigation Association, California Landscape Contractors Association, American Society of Landscape Architects, International Society of Arboculture, et al to develop consistent training and certification materials that will lead to an improvement in landscape water use efficiency by all landscape professionals. CGIC should incorporate materials such as MWD's California Friendly Landscapes and Protector del Agua materials, the Bay Friendly Landscape Guidelines and other existing training materials and should coordinate with and seek the input from local land use agencies and water suppliers prior to finalizing these materials.
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RECOMMENDATION 36

Develop Guidelines and Specifications for Landscape Maintenance Practices, including the documentation of local and regional economic and environmental benefits associated with these practices.

Action 36.1	CUWCC should work with the Landscape Industry to revise existing publications or develop new educational materials in English and Spanish for landscape maintenance professionals and homeowners to promote landscape maintenance practices that support water use efficiency. This would include the development of on-line or in-person training components that could be incorporated into existing training programs or offered as a stand-alone program.
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RECOMMENDATION 37

Standardize plant labels to identify the water requirements of the plants.

Action 37.1	The nursery industry should work with university researchers to develop standard water use information for plant labels.
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Economics

RECOMMENDATION 38

Urban water suppliers (wholesalers and retailers) should adopt water conserving rate structures as defined by the Task Force.

Action 38.1	CUWCC should convene a committee no later than January 31, 2006 to determine the appropriate thresholds of the percent of total rates based revenue that is derived from the fixed versus volumetric portions; work from this committee shall result in adoption of changes to BMP 11 (conservation pricing) by December 31, 2006. If, however, the deliberative process remains undefined at the end of the specified term, the thresholds identified in the existing Implementation structure would constitute the course of action for BMP 11. As part of this effort, wholesale water suppliers that are signatories to the CUWCC's MOU shall make a good faith effort to define a standard for conservation oriented rate structures. Task Force members whose organizations are signatories to the MOU commit to supporting the general structure of this rate proposal in these deliberations.
Action 38.2	If the CUWCC does not adopt a revised BMP 11 by December 31, 2006, the Legislature should revise the Urban Water Management Planning Act to use the Task Force-developed Definition of water conserving rate structures as the definition for Conservation Pricing in the Demand Management Measures (DMMs) section and require water suppliers to report on their implementation of a conservation rate structure.
Action 38.3	Reporting on implementation of a conservation rate structure should be a factor in determining whether or not an UWMP is complete. Existing law already requires a "complete" UWMP to be submitted to DWR in order to be eligible for drought assistance and grant funds administered by DWR. Many other state agencies, such as the State Water Resources Control Board, should use DWR's list of complete UWMPs to determine eligibility for various funding programs (e.g. State Revolving Funds).
Action 38.4	CUWCC should adjust the reporting and coverage requirements for effective data gathering and determination of implementation; changes to the coverage requirements should include a phased approach to allow water suppliers adequate time to respond. This would require a change to the CUWCC's MOU and adoption by their membership.
Action 38.5	Water suppliers should consider using the revenue generated from the top tiers of inclining block rate structures, revenue from customers over their water budgets, and revenue from customers who use excessive amounts of water to fund landscape water conservation programs and incentives.
Action 38.6	Water suppliers should consider establishing a monthly billing system that clearly communicates the water supplier's rate structure and the customer's current and historical consumption of water, if it is cost-effective for the water supplier to do so.
Action 38.7	CUWCC should analyze implementation of conservation pricing and this recommendation should be reevaluated for performance in 2012.
Action 38.8	CUWCC should sponsor training workshops throughout the state on implementing water conserving rate structures targeted at conservation coordinators, board members, and finance and rates professionals.
Action 38.9	The State should create a low- or no-interest revolving loan fund to provide financial assistance to water suppliers to cover the costs of initial design, public education, consultant, computer hardware, billing collateral, and other expenses necessary to transition from their existing billing systems to a water conservation rate structure.

RECOMMENDATION 39

Investor owned water utilities should be allowed to decouple sales from revenue in their rates.

Action 39.1	The CA Public Utilities Commission should adopt a water rates decoupling mechanism to promote conservation rates by private water companies (IOUs). The Commission should allow cost recovery for water conservation programs.
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RECOMMENDATION 40

State and local agencies should give consideration to funding landscape water conservation projects through specific funding programs.

Action 40.1	The State should give consideration funding water conservation and water recycling projects with State Drinking Water and Wastewater Revolving Funds, watershed restoration, and non-point source pollution reduction programs.
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Action 40.2	The State should give consideration to projects that implement or achieve the recommendations of the Landscape Task Force in the next phase of funding for water use efficiency projects funded by Proposition 50.
Action 40.3	The State should give consideration to implementation of landscape water conservation and recycled water projects in the annual portion of the State Drinking Water and Wastewater Revolving Funds.
Action 40.4	The State should give consideration to funding mutually beneficial projects that improve landscape water use efficiency, watershed restoration, and non-point source pollution reduction.
Action 40.5	Water suppliers should pursue funding for landscape water use efficiency programs from watershed restoration and non-point source reduction program funds implemented by local agencies as part of their storm water management plan/ program.
Action 40.6	Water suppliers and state, county and local governments charged with reducing non-point source pollution should coordinate funding and implementation of landscape water use efficiency programs.

RECOMMENDATION 41

Incentives should be provided to customers with large landscapes to implement appropriate actions through the redesign, installation, upgrade and maintenance of low water using plants and irrigation systems including the installation of Smart Controllers, dedicated landscape meters and submeters and low water using plants.

Action 41.1	The State should consider offering income tax credits for business expenditures on water conserving technologies and conversion to low water using landscapes in large landscapes as an investment in demand management and environmental protection.
Action 41.2	Water suppliers should invest in appropriate landscape water conservation measures and programs to reduce demand and improve water quality that are cost-effective to the water supplier.
Action 41.3	Water suppliers should encourage installation and retrofit of dedicated landscape meters and submeters by adjusting capacity and other charges that would financially penalize or discourage the installation of meters to measure landscape irrigation water use.
Action 41.4	The State and water suppliers should provide financial incentives that are cost-effective to homeowner's associations and other appropriate entities to upgrade existing irrigation controllers with Smart Controllers to irrigate common areas, parks and slopes and should provide appropriate financial incentives and reduce barriers for expanded use of recycled water on new and existing landscapes.

RECOMMENDATION 42

Incentives should be provided to individual home owners to install Smart Controllers, convert landscaping to low water using plants, install drip irrigation systems, and more efficient landscape irrigation sprinkler heads and other water conserving devices.

Action 42.1	The State and water suppliers should work with the major landscape irrigation equipment retailers and irrigation distributors (Home Depot, Lowes, Target, Wal-Mart, Ace, Armstrong, etc.) to provide rebates that are cost-effective to the implementing entity for the purchase of Smart Controllers, drip irrigation components, more efficient sprinkler heads, native or other low water using landscaping, and whatever else has a demonstrated ability to reduce landscape water use to homeowners.
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RECOMMENDATION 43

Incentives should be provided to builders who design, build, and incorporate water efficient landscape design, systems, devices and programs into new residential, commercial, industrial, retail and office developments.

Action 43.1	Water suppliers should be allowed to lower the water demand estimates to accurately reflect the incorporation of water efficient landscape design and Smart Controllers, rather than use traditional water demand assumptions in their analyses of water supply availability and verifications for new development projects as required by SB 221 and SB 610.
Action 43.2	CUWCC should assimilate and organize water efficient landscape standards based on Recommendations in this report and including materials such as MWD's California Friendly Landscapes Program, Protector del Agua materials, the Bay Friendly Landscape Guidelines, the Irrigation Association's Best Management Practices, and other existing programs, for all new development by region and microclimate. These standards could be used by local water suppliers in the development of incentive programs for developers.
Action 43.3	CUWCC, CLCA, ASLA, ASIC, IA and other appropriate organizations should work with LEED to ensure that water efficiency is taken into greater consideration. LEED should then promote these new standards with the mortgage financing industry (e.g. Fannie Mae) to provide incentives (e.g. lower interest rates) for applicants purchasing, refinancing or upgrading sites using LEED standards.



AB 2717 Landscape Task Force Members

Chair	Ron Munds , Conservation Manager, City of San Luis Obispo
Vice-Chair	Frances Spivy-Weber , Executive Director, Mono Lake Committee Representing: California Bay Delta Authority
Vice-Chair	David F. Zoldoske , President, Irrigation Association Director, Center for Irrigation Technology, California State University, Fresno
Gus Ayer	City Council Member, City of Fountain Valley, Representing League of California Cities
Tim Blair	Program Manager, Water Use Efficiency, Metropolitan Water District of Southern California
Ronnie Cohen	Senior Policy Analyst, Natural Resources Defense Council
Larry Costello	Environmental Horticulture Advisor, University of California Cooperative Extension
Donna E. Decker	Principal Planner, City of Pleasanton, Representing League of California Cities
Irene Esparza Portillo	Executive Director, Project Amiga (Education and Training/Outreach)
Dana Haasz	Water Conservation Administrator, San Francisco Public Utilities Commission Representing California Urban Water Conservation Council
Janet Hartin	Environmental Horticulture Advisor, University of California Cooperative Extension
Bill Jacoby	Director, Public Affairs, San Diego County Water Authority
Catherine Kutsuris	Deputy Director, Contra Costa County Community Development Department Representing California State Association of Counties
Steve LaMar	Chair, Water Resources Task Force of the California Building Industry Association
Jim Metropulos	Legislative Representative, Sierra Club California
Darryl Miller	Board Chair, Irvine Ranch Water District
Jonas Minton	Water Policy Advisor, Planning and Conservation League
Adán Ortega	Advisor, Metropolitan Water District (served during first phase)
Bob Perry	Principal, Perry and Associates Professor Emeritus, California Polytechnic State University, Pomona
Virginia Porter	Deputy Director, Water Resources, City of Santa Rosa
Terry Roberts	Director, State Clearinghouse, Governor's Office of Planning and Research
Larry Rohlfs	Assistant Executive Director, California Landscape Contractors Association
Peter Silva	Board Member, State Water Resources Control Board
Tracy Slavin	Branch Chief, Mid-Pacific Region, United States Bureau of Reclamation
Rick Soehren	Water Policy Advisor, California Department of Water Resources
Scott Sommerfeld	Water Conservation Representative, East Bay Municipal Utility District
Jan Tubiolo	Co-Chair, San Diego County Xeriscape Council
Eric Wesselman	Regional Representative, Sierra Club Representing California Urban Water Conservation Council
Sarah West	Treasurer, California Green Industry Council
Meena Westford	Area Planning Officer, Southern California Area Office Lower Colorado Region, United States Bureau of Reclamation

Chair

Bill Jacoby, San Diego County Water Authority

Vice-Chair

Catherine Kutsuris, Contra Costa County Community Development Department

Vice-Chair

Jim Metropulos, Sierra Club

Donald Ackley	Coachella Valley Water District
Hossein Ashktorab	Santa Clara Valley Water District
Gus Ayer	City of Fountain Valley
Tim Barr	Western Municipal Water District of Riverside County
Lucille Billingsley	U.S. Bureau of Reclamation
Tim Blair	Metropolitan Water District of Southern California
Jennifer Burke	City of Santa Rosa
Chris Dundon	Contra Costa Water District
Misty Gonzales	Goleta Water District
Ted Haring	Eastern Municipal Water District
Paul Jones	Irvine Ranch Water District
Adán Ortega	Metropolitan Water District of Southern California
Larry Rohlfes	California Landscape Contractors Association
Rick Soehren	California Department of Water Resources
Scott Sommerfeld	East Bay Municipal Utility District
Mark Tetterer	Irvine Ranch Water District
Meena Westford	U.S. Bureau of Reclamation



Work Group 1

Coordination, Processes, & Institutions



Chair

Lynn Florey, Sonoma County Water Agency

Vice-Chair

Ronnie Cohen, Natural Resources Defense Council

Vice-Chair

Warren S. Gorowitz, Ewing Irrigation

Tom Ash	HydroPoint Data Systems
Hossein Ashktorab	Santa Clara Valley Water District
Joe Berg	Municipal Water District of Orange County
Don Clark	Rain Bird Corporation
Robert Eagle	Contra Costa Water District
Kent Frame	California Department of Water Resources
Bob Galbreath	City of Santa Monica
Kevin Gordon	Hunter Industries
Ali Harivandi	University of California Cooperative Extension
Gary Kah	AquaMetrics, LLC
Fawzi Karajeh	California Department of Water Resources
Marc Lippert	Lake Arrowhead Community Services District
Darryl Miller	Irvine Ranch Water District
Toni Monzon	Bilingual Training Institute
Dan Muelrath	City of Santa Rosa
Ivy Munion	I.S.C. Group
John Ossa	Gardener's Guild
Richard Reasoner	Dendron Landscape Management Consultants
Andy Slack	Spot Water Management
Scott Sommerfeld	East Bay Municipal Utility District
Mark Tetterer	Irvine Ranch Water District
Bob Walker	Cal Poly Irrigation Training and Research Center
John Wiedmann	Metropolitan Water District of Southern California
Chris Willig	Environmental Water Management



Work Group 2

Irrigation





Work Group 3

**Landscape Design,
Plants, Turf Grass,
& Soils**



Chair

Bob Perry, Perry and Associates

Vice-Chair

Chris Dundon, Contra Costa Water District

Vice-Chair

Jan Tubiolo, San Diego County Xeriscape Council

- Dan Carney City of San Diego
- Dennis Connor Monrovia Growers
- Larry Costello University of California, Cooperative Extension
- Ali Davidson Sonoma County Water Agency
- Irene Esparza Portillo Project Amiga
- Warren S. Gorowitz Ewing Irrigation Products
- William Granger Otay Water District
- Robert Green University of California, Riverside
- Cynthia Havstad Stopwaste.org
- Jim Husting California Golf Course Superintendents Association
- Paul Jones Irvine Ranch Water District
- Mark Marriott Village Nurseries
- Dan Muelrath City of Santa Rosa
- Tom Noonan Ewing Irrigation Products
- Lawrence Oki University of California, Cooperative Extension
- Tracy Slavin United States Bureau of Reclamation
- Mark Tettemer Irvine Ranch Water District
- Robert Wade California Landscape Contractors Association
- Sarah West California Green Industry Council



Work Group 4

Economics



Chair

Steve LaMar, Building Industry Association

Vice-Chair

Thomas Gackstetter, Los Angeles Department of Water and Power

Vice-Chair

Mike McCullough, Northern California Golf Association

- Tom Ash HydroPoint Data Systems
- Gus Ayer City of Fountain Valley
- Tim Blair Metropolitan Water District of Southern California
- Jennifer Burke City of Santa Rosa
- Tom Chesnutt A&N Technical Services
- Ronnie Cohen Natural Resources Defense Council
- Bram Elias San Francisco Public Utilities Commission—Retail
- Darryl Miller Irvine Ranch Water District
- Larry Rohlfes California Landscape Contractors Association
- Mark Tettemer Irvine Ranch Water District
- Meena Westford U.S. Bureau of Reclamation

Task Force Process

In response to AB 2717, the California Urban Water Conservation Council assembled the stakeholder based Landscape Task Force in February 2005. The Landscape Task Force's membership of 30 people included representatives of the Department of Water Resources, State Water Resources Control Board, California Bay-Delta Authority, United States Bureau of Reclamation, landscape industry groups, manufacturers, the building and construction industry, urban water suppliers, environmental advocacy and environmental justice groups, the League of California Cities, the California State Association of Counties, and the University of California. Four technical Work Groups, comprised of 84 participants, conducted 30 meetings over the past year. Two public workshops were conducted to solicit public comment. The Council facilitated the meetings, provided staff support and raised funds to finance this project.

The recommendations in this report acknowledge and reflect the improvements in landscape technology and management in California over the past 15 years (since adoption of the California Model Water Efficient Landscape Ordinance) and anticipate the need for ever improving landscape water use efficiency even more over the next 25 years. The recommendations include changes to California law, revisions to the Model Ordinance, and amendments to the California Urban Water Conservation Council's Memorandum of Understanding and Best Management Practices. The legislative process, regulatory process, and the Council's governing rules all entail extensive fact gathering and public participation. The Task Force recommendations are not intended to supersede the existing processes, but rather to provide ideas and impetus to these institutions based on broad support from the stakeholder groups involved in the Landscape Task Force process. It is the hope of the Task Force that ample weight be given to the extensive deliberations and collaborative process leading to these recommendations.

In addition to the legislative, regulatory, and administrative changes proposed by the Task Force, there are recommendations regarding public education, training and certification, research, and financial incentives. When taken together, implementation of the recommendations and corresponding actions will chart a bright future for water efficient California landscapes.

California Urban Water Conservation Council Support for the Task Force



The Council's Executive Director Mary Ann Dickinson provided policy level direction and was instrumental in raising the necessary funds for the Task Force.

Karl Kurka participated in Work Group Two and Task Force meetings.

Molly Garcia, Jeffrey Hughes, and Heather Woodford took care of the administrative tasks.

Beth Ernsberger designed and maintained the Landscape Task Force web page with assistance from Maria Malapaya.

Katie Shulte Joung facilitated all aspects of the Task Force and was the Lead Staff for Work Group Four. She worked with the Task Force and Work Group Chairs and Recorders to capture the range of views expressed; synthesized results; and prepared meeting summaries.

Jeremy Prillwitz served as Recorder for Work Group Two.

Marsha Prillwitz was the overall Project Manager and Advisor to the Council and Task Force.





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